

OIPE

## ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/910,345B

DATE: 12/12/2002 TIME: 15:21:50

Input Set : A:\Nb201700.app

Output Set: N:\CRF4\12122002\I910345B.raw

```
4 <110> APPLICANT: SHEPARD, H. MICHAEL
        LACKEY, DAVID B.
         CATHERS, BRIAN E.
        SERGEEVA, MARIA V.
 9 <120> TITLE OF INVENTION: METHODS FOR IDENTIFYING THERAPEUTIC TARGETS FOR
        TREATING INFECTIOUS DISEASE
12 <130> FILE REFERENCE: NB-2017.00
14 <140> CURRENT APPLICATION NUMBER: 09/910,345B
15 <141> CURRENT FILING DATE: 2001-07-20
17 <150> PRIOR APPLICATION NUMBER: 60/219,598
18 <151> PRIOR FILING DATE: 2000-07-20
20 <150> PRIOR APPLICATION NUMBER: 60/244,953
21 <151> PRIOR FILING DATE: 2000-11-01
23 <150> PRIOR APPLICATION NUMBER: 60/276,728
24 <151> PRIOR FILING DATE: 2001-03-16
26 <160> NUMBER OF SEQ ID NOS: 12
28 <170> SOFTWARE: PatentIn 2.1
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 60
32 <212> TYPE: PRT
33 <213> ORGANISM: Pseudomonas aeruginosea
35 <220> FEATURE:
36 <221> NAME/KEY: NON_TER
37 <222> LOCATION: 1,60
39 <400> SEQUENCE: 1
40 Arg Asn Gly Gly Gln Ile Leu Val Glu Ala Leu Arg Arg Asn Ala Val
                    5
41 1
43 Asp Thr Val Tyr Cys Ile Pro Gly Glu Ser Tyr Leu Pro Val Leu Asp
                                    25
46 Ala Leu Tyr Asp Thr Asp Gly Ile Arg Thr Val Val Thr Arg His Glu
47
49 Gly Ala Ala Ser Asn Met Ala Asp Ala Tyr Gly Lys
                           55
50
       50
53 <210> SEO ID NO: 2
54 <211> LENGTH: 21
55 <212> TYPE: PRT
56 <213> ORGANISM: Artificial Sequence
58 <220> FEATURE:
59 <223> OTHER INFORMATION: Description of Artifical Sequence: Sequence comparison
         of SEQ ID NO: 1 to SEQ ID NO: 3
60
62 <220> FEATURE:
63 <221> NAME/KEY: NON CONS
```

64 <222> LOCATION: 1-2,3-4,5-6,6-7,7-8,8-9,9-10,10-11,13-14,14-15,18-19

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/910,345B

DATE: 12/12/2002
TIME: 15:21:50

Input Set : A:\Nb201700.app

Output Set: N:\CRF4\12122002\I910345B.raw

```
66 <400> SEQUENCE: 2
     67 Arg Gly Gly Leu Arg Val Gly Pro Leu Ala Gly Ile Arg Val Thr Arg
                        5
     70 His Glu Ala Asp Ala
                    20
     74 <210> SEQ ID NO: 3
     75 <211> LENGTH: 59
     76 <212> TYPE: PRT
     77 <213> ORGANISM: Homo sapiens
     79 <220> FEATURE:
     80 <221> NAME/KEY: NON TER
     81 <222> LOCATION: 1,59
     83 <221> NAME/KEY: NON CONS
     84 <222> LOCATION: (34)...(35)
W--> 86 <400> 3
     87 Arg His Gly Glu Asn Val Ala Ala Val Leu Arg Ala His Gly Val
                                            10
     90 Arg Phe Ile Phe Thr Leu Val Gly Gly His Ile Ser Pro Leu Leu Val
                    20
                                        25
     93 Ala Cys Glu Lys Leu Gly Ile Arg Val Val Asp Thr Arg His Glu Val
                                    40
     96 Thr Gly Val Phe Ala Ala Asp Ala Met Ala Arg
     97
           50
                                5.5
    100 <210> SEQ ID NO: 4
    101 <211> LENGTH: 60
    102 <212> TYPE: PRT
    103 <213> ORGANISM: Pseudomonas aeruginosea
    105 <220> FEATURE:
    106 <221> NAME/KEY: NON TER
    107 <222> LOCATION: 1,60
    109 <400> SEQUENCE: 4
    110 Leu Thr Gly Arg Pro Gly Ile Cys Phe Val Thr Arg Gly Pro Gly Ala
    111 1
    113 Thr His Ala Ala Asn Gly Val His Thr Ala Gln Gln Asp Ser Thr Pro
                    20
                                         25
    116 Met Ile Leu Phe Val Gly Gln Val Glu Ser Ala Phe Lys Gly Arg Glu
                35
    119 Ala Phe Gln Glu Val Asp Tyr Val Gln Met Phe Ser
    120
            50
                                 55
    123 <210> SEQ ID NO: 5
    124 <211> LENGTH: 21
    125 <212> TYPE: PRT
    126 <213> ORGANISM: Artificial Sequence
    128 <220> FEATURE:
    129 <223> OTHER INFORMATION: Description of Artifical Sequence: Sequence comparison
    130
              of SEQ ID NO: 4 to SEQ ID NO: 6
    132 <220> FEATURE:
    133 <221> NAME/KEY: NON_CONS
    134 <222> LOCATION: 1-2,2-3,3-4,5-6,8-9,9-10,10-11,12-13,13-14,14-15,15-16,16-17,
```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/910,345B

DATE: 12/12/2002 TIME: 15:21:50

Input Set: A:\Nb201700.app

Output Set: N:\CRF4\12122002\I910345B.raw

```
135
          17-18, 18-19, 20-21
137 <400> SEQUENCE: 5
138 Leu Gly Gly Val Thr Gly Pro Gly Thr Val Ala Gln Pro Leu Gly Arg
139 1
141 Ala Gln Val Asp Phe
142
                20
145 <210> SEQ ID NO: 6
146 <211> LENGTH: 60
147 <212> TYPE: PRT
148 <213> ORGANISM: Homo sapiens
150 <220> FEATURE:
151 <221> NAME/KEY: NON TER
152 <222> LOCATION: 1,60
154 <400> SEQUENCE: 6
155 Leu Ser Gly Thr Val Gly Val Ala Ala Val Thr Ala Gly Pro Gly Leu
158 Thr Asn Thr Val Thr Ala Val Lys Asn Ala Gln Met Ala Gln Ser Pro
                20
161 Ile Leu Leu Gly Gly Ala Ala Ser Thr Leu Leu Gln Asn Arg Gly
162
                                40
164 Ala Leu Gln Ala Val Asp Gln Leu Ser Leu Phe Arg
      50
                            55
168 <210> SEQ ID NO: 7
169 <211> LENGTH: 55
170 <212> TYPE: PRT
171 <213> ORGANISM: Pseudomonas aeruginosea
173 <220> FEATURE:
174 <221> NAME/KEY: NON TER
175 <222> LOCATION: 1,55
177 <400> SEQUENCE: 7
178 Gly Leu Ala Lys Trp Ala Val Glu Ile Asp Arg Ile Glu Arg Ile Pro
179 1
181 Glu Ile Val Gly Arg Ala Phe Ser Val Ala Thr Ser Gly Arg Pro Gly
                                    25
184 Pro Val Val Val Ala Leu Pro Glu Glu Ile Leu Phe Gly Ser Ala Gln
            35
                                40
187 Val Ala Asp Ala Pro Glu Pro
188
       50
191 <210> SEQ ID NO: 8
192 <211> LENGTH: 18
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artifical Sequence: Sequence comparison
         of SEQ ID NO: 7 to SEQ ID NO: 9
200 <220> FEATURE:
201 <221> NAME/KEY: NON CONS
202 <222> LOCATION: 1-2,2-3,3-4,4-5,5-6,6-7,8-9,12-13,13-14,15-16,16-17,17-18
204 <400> SEQUENCE: 8
```

RAW SEQUENCE LISTING DATE: 12/12/2002 PATENT APPLICATION: US/09/910,345B TIME: 15:21:50 Input Set : A:\Nb201700.app Output Set: N:\CRF4\12122002\I910345B.raw 205 Leu Lys Val Arg Ile Ala Ser Gly Pro Gly Pro Val Val Leu Pro Leu 208 Val Pro 211 <210> SEQ ID NO: 9 212 <211> LENGTH: 55 213 <212> TYPE: PRT 214 <213> ORGANISM: Homo sapiens 216 <220> FEATURE: 217 <221> NAME/KEY: NON TER 218 <222> LOCATION: 1,55 220 <221> NAME/KEY: MOD RES 221 <222> LOCATION: (22) 222 <223> OTHER INFORMATION: Any Amino Acid -> 224 <400> 9 225 Pro Leu Cys Lys Phe Cys Val Ser Val Pro Arg Val Arg Asp Ile Val 5 W--> 228 Pro Thr Leu Arg Ala Xaa Met Ala Ala Ala Gln Ser Gly Thr Pro Gly 20 25 231 Pro Val Phe Val Glu Leu Pro Val Asp Val Leu Tyr Pro Phe Phe Met 40 234 Val Gln Lys Glu Met Val Pro 50 238 <210> SEQ ID NO: 10 239 <211> LENGTH: 54

- 240 <212> TYPE: PRT
- 241 <213> ORGANISM: Pseudomonas aeruginosea
- 243 <220> FEATURE:
- 244 <221> NAME/KEY: NON TER
- 245 <222> LOCATION: 1,54
- 247 <400> SEQUENCE: 10
- 248 Leu Leu Glu Asn Glu Pro Gly Ala Leu Ser Arg Val Val Gly Leu
- 251 Phe Ser Gln Arg Asn Tyr Asn Ile Glu Ser Leu Thr Val Ala Pro Thr 20 25
- 254 Glu Asp Pro Thr Leu Ser Arg Leu Thr Leu Thr Thr Val Gly His Asp 255 35 40
- 257 Glu Val Ile Glu Gln Ile
- 258 50
- 261 <210> SEQ ID NO: 11
- 262 <211> LENGTH: 18
- 263 <212> TYPE: PRT
- C--> 264 <213> ORGANISM: Artificial Sequence
  - 266 <220> FEATURE:
    - 267 <223> OTHER INFORMATION: Description of Artifical Sequence: Sequence comparison of SEQ ID NO: 10 to SEQ ID NO: 12
    - 270 <220> FEATURE:
    - 271 <221> NAME/KEY: NON CONS
    - 272 <222> LOCATION: 3-4,5-6,6-7,8-9,9-10,10-11,12-13,13-14,15-16,17-18
    - 274 <400> SEQUENCE: 11

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/910,345B TIME: 15:21:50

DATE: 12/12/2002

Input Set : A:\Nb201700.app

Output Set: N:\CRF4\12122002\I910345B.raw

275 Leu Leu Pro Gly Leu Arg Asn Asn Ala Asp Pro Leu Gly His Glu 10 278 Val Ile 281 <210> SEQ ID NO: 12 282 <211> LENGTH: 53 283 <212> TYPE: PRT 284 <213> ORGANISM: Homo sapiens 286 <220> FEATURE: 287 <221> NAME/KEY: NON TER 288 <222> LOCATION: 1,53 290 <221> NAME/KEY: NON CONS 291 <222> LOCATION: (42)..(43) W--> 293 <400> 12 294 Leu Leu Leu Ser Leu Pro Gly Leu Ala Ala Gly Ile Thr Ile Leu 295 1 5 297 Leu Thr Asp Arg Asn Leu Asn Thr Thr Phe Phe Asp Pro Ala Gly Gly 25 300 Gly Asp Pro Ile Leu Tyr Gln His Leu Phe Ile Phe Gly His Pro Glu 35 40 303 Val Tyr Asn Arg Ile 50 304

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/910,345B

DATE: 12/12/2002 TIME: 15:21:51

Input Set : A:\Nb201700.app

Output Set: N:\CRF4\12122002\I910345B.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; Xaa Pos. 22

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/910,345B

DATE: 12/12/2002

TIME: 15:21:51

Input Set : A:\Nb201700.app

Output Set: N:\CRF4\12122002\I910345B.raw

L:86 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3 L:224 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9

L:228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:16

L:264 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11

L:293 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:12